



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,306	07/09/2003	John E. Johnson	717119.336	1305

27128 7590 09/21/2004

BLACKWELL SANDERS PEPPER MARTIN LLP
720 OLIVE STREET
SUITE 2400
ST. LOUIS, MO 63101

EXAMINER


PARSLEY, DAVID J

ART UNIT	PAPER NUMBER
----------	--------------

3643

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/604,306	Applicant(s) JOHNSON, JOHN E. 	
	Examiner David J Parsley	Art Unit 3643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11-5-03</u> | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it contains more than 150 words.

Correction is required. See MPEP § 608.01(b).

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the pull chain having linkages of spiral spring cutting head implements must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

The drawings are objected to because figures 5a and 5b are not labeled. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include

Art Unit: 3643

all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claim 7 is objected to because of the following informalities: the terms “spinal canal” in line 4 and “spinal channel” in line 8 are both used to describe the same part of the animal carcass and the claim should be amended so that these terms are consistent. Appropriate correction is required.

Claim Rejections - 35 USC § 102

Art Unit: 3643

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-6 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by DE

Patent No. 19757745.

Referring to claims 1, 6 and 18, the German patent discloses an apparatus for removing spinal cord material from a carcass of an animal comprising, an elongated flexible tube – at 9, forming a vacuum casing – see figure 1, a flexible rotatable shaft – at 12, extending through the tube and captured therein – see figure 1, and a cutting bit – at 1,2, attached to a tip end of the shaft – see figure 1, and extending from the tube operable for engaging and breaking down a spinal cord material sufficient for vacuuming – see for example figures 1-2 and the English abstract.

Referring to claim 3, the German patent discloses the cutting bit is a drill style bit – see for example figures 1-2.

Referring to claim 4, the German patent discloses the elongated flexible tube – at 9, is in communication with a vacuum source – see for example figures 1-2 and the English abstract.

Referring to claim 5, the German patent discloses the rotatable shaft is operably attached to a rotation drive for effecting rotation of the shaft and bit – see for example figures 1-2 and the English abstract.

Claims 9-10 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,126,535 to Post.

Referring to claims 9 and 12, Post discloses an apparatus for removing spinal cord material from a carcass of an animal comprising, a pull chain – at 14-23, having linkages of spiral spring cutting head implements – proximate 15 and 18, and a feed line – at 13, attached to an end of the chain for insertion through the spinal canal and pulling the pull chain through – see for example figure 2A.

Referring to claim 10, Post discloses the pull chain has linkages of spiral spring cutting head implements with differing diameter cutting edges – see for example figures 2A-3B.

Claims 14-17 are rejected under 35 U.S.C. 102(b) as being anticipated by DE Patent No. 19824966.

Referring to claims 14 and 17, the German patent '966 discloses an apparatus/method for removing spinal cord material from a carcass of an animal comprising, an elongated flexible tube – at 2, forming a vacuum casing and a flexible high-pressure tubing – at 20, extending through the elongated flexible tube and captured therein for channeling and delivering fluid under pressure to a high pressure nozzle – at 3,4, for emitting a jet spray of fluid sufficient to break down a spinal cord material for vacuuming through the elongated flexible tube – at 5 – see for example figures 1-4 and the English abstract.

Referring to claim 15, the German patent '966 further discloses a vacuum source – see for example figure 2, in communication with the elongated flexible tube forming a vacuum – see for example figures 1-3 and the English abstract.

Referring to claim 16, the German patent '966 further discloses a high pressure fluid source – see figure 2, in fluid communication with the high pressure tubing – see for example figures 1-4 and the English abstract.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over the German patent as applied to claim 1 above, and further in view of U.S. Patent No. 1,900,267 to Youman. The German patent does not disclose the cutting bit is an auger style bit. Youman does disclose the cutting bit is an auger style bit – at 15-19. Therefore it would have been obvious to one of ordinary skill in the art to take the device of the German patent and add the auger style bit of Youman, so as to allow for the bit to be quickly and easily drilled into the animal carcass.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over the German patent as applied to claim 6 above, and further in view of U.S. Patent No. 6,126,535 to Post. The German patent does not disclose inserting a feed line through the spinal canal of an animal carcass where the feed line has a pull chain attached to a trailing edge of the feed line, and pulling the feed line and pull chain attached thereto through the spinal channel where the pull chain has linkages of spiral spring cutting head implements. Post does disclose inserting a feed line – at 13, through the spinal canal of an animal carcass where the feed line has a pull chain – at 14-23, attached to a trailing edge of the feed line, and pulling the feed line and pull chain attached thereto through the spinal channel where the pull chain has linkages of spiral spring

Art Unit: 3643

cutting head implements – proximate 15 and/or 18 – see for example figure 2A. Therefore it would have been obvious to one of ordinary skill in the art to take the method of the German patent and add the feed line and pull chain of Post, so as to allow for proper gripping of the spine of the animal carcass.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over the German patent ‘745 as applied to claim 6 above, and further in view of DE Patent No. 19824966. German patent ‘745 further discloses inserting an elongated tube vacuum casing – at 9, through the spinal channel – see figure 1, of a carcass, where the elongated flexible tube has a flexible high pressure tubing – at 11 and/or 16, extending therethrough and a high pressure nozzle – at 3,4, in fluid communication with the high pressure tubing – see figure 1, and attached to one end of the high pressure tubing – see figure 1. German patent ‘745 does not disclose the nozzle emits a high pressure jet spray at a pressure sufficient to break down spinal cord material for vacuuming out and applying a vacuum to the flexible tube vacuum casing for extracting the spinal cord material. German patent ‘966 does disclose the nozzle – at 3,4, emits a high pressure jet spray at a pressure sufficient to break down spinal cord material for vacuuming out and applying a vacuum to the flexible tube vacuum casing for extracting the spinal cord material – see for example figures 1-3 and the English abstract. Therefore it would have been obvious to one of ordinary skill in the art to take the device of the German patent ‘745 and add the jet spray of German patent ‘966, so as to allow for removal of the spinal cord from the animal carcass without chipping or damaging the bones of the spine.

Claims 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Post as applied to claims 9 or 11 above, and further in view of U.S. Patent No. 4,608,732 to Hill et al.

Art Unit: 3643

Post further discloses a line drive for pulling the feed line and chain through the canal – see for example figure 2A. Post does not disclose a sanitization system having high-pressure spray nozzles proximately disposed to the pull chain after it exits the carcass operable to spray sanitizer solution on the pull chain for sanitizing and removing debris. Hill et al. does disclose a sanitization system having high-pressure spray nozzles – at 60, proximately disposed to the pull chain after it exits the carcass operable to spray sanitizer solution on the pull chain for sanitizing and removing debris – see for example figure 1. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Post and add the sanitization system of Hill et al., so as to allow for the mechanical components of the device to be clean from any contaminants to prolong the active life of the device.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to spine and spinal cord removal devices/methods in general:

U.S. Pat. No. 1,313,579 to Conger et al. – shows drill bit cutting instrument

U.S. Pat. No. 1,492,333 to Law et al. – shows drill bit cutting instrument

U.S. Pat. No. 2,479,010 to Jones – shows spine removal device

U.S. Pat. No. 4,262,388 to Durand et al. – shows spine-cutting device

U.S. Pat. No. 5,507,688 to Van Ochten – shows spine-cutting device

Art Unit: 3643

U.S. Pat. No. 5,655,960 to Van Horeebeck – shows spine-cutting device

U.S. Pat. No. 5,931,730 to Bernhardt et al. – shows catheter device

U.S. Pat. No. 6,511,483 to Gwyther – shows spinal cord removing device

FR Pat. No. 2612370 – shows spine-cutting device

EP Pat. No. 187064 – shows pull chain device

JP Pat. No. 2002-176907 – shows spinal cord removal device

WO Pat. No. 97/39633 – shows spinal cord removal device

NL Pat. No. 1003502 – shows spinal cord removal device

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J Parsley whose telephone number is (703) 306-0552. The examiner can normally be reached on 9hr compressed.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on (703) 308-2574. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/604,306

Page 10

Art Unit: 3643

DP

David Parsley
Patent Examiner
Art Unit 3643



PETER M. POON
SUPERVISORY PATENT EXAMINER

9/16/04